GIA Environmental Health and Safety Hazardous Materials and Dangerous Goods Transportation Standard

DOCUMENT IDENTIFIER: A-SP-ELMF798-00-0000 Rev A, 22-Dec-1992

ABSTRACT: This GIA standard defines the basic elements and responsibilities of a site Hazardous Materials and Dangerous Goods Transportation Program.

APPLICABILITY: This standard shall apply to GIA facilities and operations worldwide, except where superceded by more stringent country or local regulations.

STATUS: APPROVED 22-Dec-1992; use VTX SMC for current status.

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REVISION HISTORY:	No previous revision exists.
Document Management Category:	Environmental Health and Safety (MEH)
Responsible Department:	GIA Environmental Health and Safety
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APPROVAL: This document has been reviewed and recommended for approval by the General Review group for its category.

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CONTENTS

1 INTRODUCTION 1
1.1 SCOPE 1
1.1.1 Policy 1
1.2 RESPONSIBILITIES 1
1.3 LANGUAGE REQUIREMENT FOR THIS STANDARD 2
1.4 DEFINITIONS 2
1.5 REGULATIONS 3

2 PROGRAM REQUIREMENTS 3
2.1 WRITTEN HAZARDOUS MATERIALS AND DANGEROUS GOODS TRANSPORTATION PROGRAM 4
2.2 IDENTIFICATION AND INVENTORY OF HAZARDOUS MATERIALS AND DANGEROUS GOODS 4
2.3 HAZARDOUS MATERIAL AND DANGEROUS GOODS CLASSIFICATION 5
2.4 PACKAGING, MARKING, AND LABELING 5
2.5 SHIPPING DOCUMENTATION 6
2.6 EMERGENCY RESPONSE NOTIFICATION 6
2.7 VEHICLE LOADING AND PLACARDING 7
2.8 CARRIERS 7
2.8.1 Vehicles Owned by Digital 7
2.9 EMPLOYEE TRAINING 8

Appendix A REFERENCED DOCUMENTS 9

A.1 Documents External to Digital 9

A.2 Ordering Information 9

1 INTRODUCTION

The purpose of this GIA standard is to define the basic elements and responsibilities of a site Hazardous Materials and Dangerous Goods Transportation Program.

1.1 SCOPE

This standard shall apply to GIA facilities and operations worldwide, unless superseded by more stringent country or local regulations.

1.1.1 Policy

A Hazardous Materials and Dangerous Goods Transportation Program shall be established.

1.2 RESPONSIBILITIES

Responsibilities of persons involved in fulfilling the requirements of this document are as follows.

- Site Manager

  Ensure that a site Hazardous Materials and Dangerous Goods Transportation Program is developed, implemented, and adhered to.

  Ensure that a site Hazardous Materials and Dangerous Goods Coordinator is appointed.

  Provide the site Hazardous Materials and Dangerous Goods Coordinator with adequate support, resources, and time to ensure that appropriate training and other program-related activities are conducted.

- Department Manager or Supervisor

  Understand and ensure full implementation of the site Hazardous Materials and Dangerous Goods Transportation Program as it affects employees.

- Site Hazardous Materials and Dangerous Goods Coordinator

  Develop and ensure the implementation of a site Hazardous Materials and Dangerous Goods Transportation Program with all its elements and participants.

  Ensure that appropriate training and other program-related activities are conducted as described in the text under subhead 2.9.

- Employees

  Participate in the development of a site Hazardous Materials and Dangerous Goods Transportation Program.

  Provide input to and assist in decisions regarding hazardous materials and dangerous goods transportation issues that affect them.

  Follow established site hazardous materials and dangerous goods transportation procedures.

Perform hazardous materials and dangerous goods transportation-related functions only after having received the proper training.

- Area Environmental Health and Safety (EH&S) Hazardous Materials and Dangerous Goods Transportation Manager

  Develop and communicate specific GIA hazardous materials and dangerous goods transportation policies and standards.

  Provide assistance in the development of procedures, tools, training, and mechanisms to assist GIA sites and operations to comply with these policies.

  Provide input, where needed, in generating site specific hazardous materials and dangerous goods transportation procedures.

1.3 LANGUAGE REQUIREMENT FOR THIS STANDARD

The details of this GIA standard and all documentation associated with it, such as manuals, training materials, signs, labels, postings, and so forth, must be available in English and the accepted and official local languages.

1.4 DEFINITIONS

Specific terms related to hazardous materials and dangerous goods that are used in this standard are defined in this section.

Article

A manufactured item that is formed to a specific shape or design during manufacture, has end-use function(s) dependent in whole or in part upon its shape or design during end use, and does not release or otherwise result in exposure to a hazardous chemical under normal conditions of use. However, the article may pose a hazard during transportation, such as a magnet, which is hazardous when transported by air.

Chemical

Any element, compound, or mixture of elements or compounds. These include, but are not limited to, any of the following (except for those specifically excluded):

Included: adhesives, asbestos-containing products (gaskets, seals, gloves), bar stock, chemicals, cleaning compounds, films, flux, fuel, gas, grease, lacquer, laminates, liquid lubricant, metals, mold release, oil, paint, pellet plastic, powders, prepregnated compounds, resins, solder paste, solvents, varnish, wax, and radioactive materials

Excluded: office supplies (unless ordered in bulk), consumer goods brought in for personal use, food stuffs, water

Hazardous material or dangerous good

A substance or material that has been determined to be capable of posing an unreasonable risk to health, safety, property, and the environment when transported in commerce and which has been designated as capable of posing such risk.

Specific country, local, and international regulations, codes, guidelines, and so forth are described in subhead 1.5.

Inquiries about these materials or goods, or about regulations, should be directed to the Dangerous Goods Transporation Manager. See VTX EHS for identification and how to contact.

Physical hazard
A chemical for which there is scientifically valid evidence that it is a combustible liquid, a compressed gas, explosive, flammable, an organic peroxide, an oxidizer, pyrophoric, unstable (reactive) or water reactive.

1.5 REGULATIONS

All materials that are considered hazardous materials or dangerous goods, under any applicable country, local, Digital, or GIA transportation law or regulation, shall be in full compliance with these laws or regulations, as applicable, when transported or offered for transportation. The laws and regulations include, but are not limited to, the following:

- Title 49 Code of Federal Regulations (United States)
- Transportation of Dangerous Goods Regulations (Canada)
- International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO)
- International Air Transport Association Dangerous Goods Regulations (IATA)
- International Maritime Dangerous Goods Code (IMO)
- United Nations Recommendations on the Transport of Dangerous Goods (Orange Book)
- European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR)
- Regulations Concerning the International Carriage of Dangerous Goods by Rail (RID)
- United Kingdom Dangerous Substances Regulations
- New South Wales Dangerous Goods Regulations (Australia)
- The Statutes of the Republic of Singapore (Poisons Act)

2 PROGRAM REQUIREMENTS

The Hazardous Material and Dangerous Goods Transportation Program shall include or address, but not be limited to, the following elements:

- Written Hazardous Materials and Dangerous Goods Program
- Identification and inventory of hazardous materials and dangerous goods
- Hazardous material and dangerous goods classification
- Packaging, marking, and labeling
- Documentation
- 24-hour emergency response notification
- Vehicle loading and placarding
- Carriers
- Safe and legal transportation in vehicles owned by Digital

- Employee training

2.1 WRITTEN HAZARDOUS MATERIALS AND DANGEROUS GOODS TRANSPORTATION PROGRAM

The Hazardous Materials and Dangerous Goods Transportation Program must be documented and must be readily available to employees. It must include site-specific program detail.

a. Identify a site hazardous materials and dangerous goods coordinator and other persons who have the required responsibilities to fulfill portions of the site program.

b. Describe how the annual hazardous materials and dangerous goods inventory is conducted. Include the up-to-date list of transportation-regulated hazardous materials and dangerous goods in the site.

c. Describe the process used to approve new hazardous materials and dangerous goods.

d. Describe the process for purchasing hazardous materials and dangerous goods.

e. Describe the process used to monitor supplier compliance with applicable country, local, Digital, and GIA hazardous materials and dangerous goods regulations.

f. Describe the process for obtaining, maintaining, and making available the necessary information to ensure all hazardous materials and dangerous goods that are purchased, shipped, or received are safely and legally transported in accordance with the applicable country, local, Digital, and GIA regulations.

g. Describe the components of the employee hazardous materials and dangerous goods transportation training program(s).

h. Describe the methods used to communicate information to employees performing hazardous material and dangerous goods-related functions when new materials are introduced.

2.2 IDENTIFICATION AND INVENTORY OF HAZARDOUS MATERIALS AND DANGEROUS GOODS

The inventory and identification of hazardous materials and dangerous goods includes the following requirements.

- Annually, compile inventories of all hazardous materials used in the site including:

  Manufacturing and process chemicals
  Customer Services supplies
  DECdirect supplies
  Site consumables, for example, cleaners, solvents, janitorial supplies
  Hazardous waste

- Describe the process used to obtain and maintain the correct classification information for all hazardous material and dangerous goods.
- Describe procedures used to ensure that all hazardous materials and dangerous goods are properly identified.
- Identify the hazardous materials or dangerous goods that are being shipped to or from the site.

- Describe procedures for reviewing materials that enter or leave the site to determine if they are hazardous materials or dangerous goods.
- Identify modes of transportation used to ship hazardous materials and dangerous goods to or from the site.
- Identify all applicable country, local, or regional hazardous materials or dangerous goods transportation regulations.

2.3 HAZARDOUS MATERIAL AND DANGEROUS GOODS CLASSIFICATION

According to the United Nations Recommendations for the Transport of Dangerous Goods, hazardous materials and dangerous goods are classified into nine classes according to the nature of the hazard they present during transportation. In general, all national and international regulations follow the same classification process.

CLASS	DESCRIPTION
Class 1	Explosives
Class 2	Gases: compressed, liquefied, dissolved, or deeply refrigerated
Class 3	Flammable liquids
Class 4	Flammable, spontaneously combustible, dangerous-when-wet solids
Class 5	Oxidizers and organic peroxides
Class 6	Poisonous and infectious substances
Class 7	Radioactive materials
Class 8	Corrosives
Class 9	Miscellaneous dangerous goods

2.4 PACKAGING, MARKING, AND LABELING

All hazardous materials and dangerous goods regulated for transport shall be packaged in accordance with the requirements of the applicable country, local, Digital, and GIA regulations.

All international shipments of hazardous materials and dangerous goods regulated for transport shall be packaged in conformance with the appropriate United Nations Performance Packaging Standards.

All packages containing hazardous materials or dangerous goods regulated for transport shall be marked and labeled in accordance with the requirements of the applicable country, local, Digital, and GIA regulations.

- Describe the process used to determine packaging requirements *and* the marking and labeling requirements for hazardous materials and dangerous goods shipped from the site.
- Describe procedures used to ensure that hazardous materials and dangerous goods are properly packaged *and* marked and labeled, as required by the applicable country, local, Digital, and GIA regulations.

2.5 SHIPPING DOCUMENTATION

Hazardous materials and dangerous goods

All hazardous materials and dangerous goods shipments shall be accompanied by a shipping paper that meets all of the applicable country, local, Digital, and GIA regulatory requirements.

- Describe the procedures used to ensure that hazardous materials and dangerous goods shipments are properly documented *and* that copies of these documents are retained and easily accessible, as required by the applicable regulations.

Hazardous waste

All hazardous waste shipments shall be accompanied by a hazardous waste manifest that meets all of the applicable country, local, Digital, and GIA regulatory requirements.

- Describe procedures used to ensure that hazardous waste shipments are properly manifested *and* that copies of the manifests are retained and easily accessible, as required by the applicable regulations.

2.6 EMERGENCY RESPONSE NOTIFICATION

All hazardous materials and dangerous goods shipments moving to, from, or within the United States requires the shipper to place on the shipping papers the telephone number of the organization that the shipper has designated as its 24-hour contact. This regulation further requires that this number be located *immediately following* the description of the hazardous material or dangerous good. Or, this telephone number may be entered in a clearly visible location with the indication that the number is for emergency response information, such as after the words **EMERGENCY CONTACT**.

To meet this requirement, Digital has registered with the Chemical Transportation Emergency Center (CHEMTREC), a service provided by the Chemical Manufacturers Association (CMA).

All hazardous materials or dangerous goods shipments in the United States and Canada must have CHEMTREC's telephone number placed on the Dangerous Goods Shipping Manifest as follows.

```
EMERGENCY CONTACT -- CHEMTREC (800) 424-9300
```

Shipments originating outside the United States or Canada should also include CHEMTREC's international telephone number on their shipping papers in the event an emergency occurs prior to the shipment arriving in the United States or Canada. For example:

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EMERGENCY CONTACT -- CHEMTREC (800)424-9300
INTERNATIONAL PHONE NUMBER -- (202)483-7616
```

NOTE

In addition, CHEMTREC also requires the supplier and product names be included on the shipping paper. For example:

```
VENDOR NAME: Digital Equipment Corporation
PRODUCT NAME: Cleaning Cartridge for TZK 10 Tape Drive (TZK1X-HA)
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2.7 VEHICLE LOADING AND PLACARDING

All hazardous materials and dangerous goods shipments shall be loaded and secured on the transport vehicle in a manner that prevents damage or leakage under normal conditions for the mode of transportation.

All hazardous materials and dangerous goods shipments shall be in compliance with all placarding requirements of the applicable country, local, Digital, and GIA regulations.

- Document and have available procedures used to ensure that hazardous materials and dangerous goods shipments are properly loaded and placarded as required by the applicable regulations.

2.8 CARRIERS

Carriers used for the transportation of hazardous materials and dangerous goods or hazardous waste must comply with all applicable country, local, Digital, and GIA laws and regulations. Site Purchasing and EH&S shall ensure that carriers are reviewed as described in this standard.

Performance reviews for all carriers who may be used to transport hazardous materials or dangerous goods shall include an evaluation of safety programs and history, hazardous materials and dangerous goods training programs, and compliance history, as well as financial and insurance records.

Selection and review of carriers for the bulk transportation of hazardous materials or dangerous goods shall include:

Evaluations of the carrier's environmental liability insurance coverage

Driver training in the proper loading and unloading procedures

Driver training in basic emergency procedures for the materials being handled

Maintenance and condition of equipment

Ability to promptly provide specialized equipment in emergency situations

Ability and willingness to enforce driver compliance with Digital safety rules and procedures while on Digital property.

2.8.1 Vehicles Owned by Digital

Document and have available the procedures that are used to ensure that all legal and safety requirements are met when hazardous materials or dangerous goods are transported on a vehicle owned by Digital.

CAUTION

Personal use vehicles owned by Digital employees must not be used to transport hazardous materials or dangerous goods.

2.9 EMPLOYEE TRAINING

Training shall be presented to all affected employees. Training shall include the following elements in detail.

- The presentation of Digital, GIA, and applicable national or international hazardous materials or dangerous goods standards or regulations.
- Site program implementation procedures, how employees can obtain and use available information, and whom employees can contact with questions.
- Specific training for persons directly involved in functions that transport, ship, receive, handle, or purchase hazardous materials or dangerous goods.
- The site training program objectives should:

  Provide awareness to laws regulating the transportation of hazardous materials or dangerous goods.

  Define and identify hazardous materials or dangerous goods that may be shipped, purchased, or transported by Digital.

  Provide instruction how to recognize proper documentation, packaging, marking and labeling, and loading of hazardous materials or dangerous goods for different modes of transportation (such as, road, air, and ocean).

  Acquaint participants with the VTX HAZMAT system and other available resources to provide assistance in matters concerning hazardous materials and dangerous goods transportation.

Presentation detail shall include the following elements.

- Format to be used, which may include lecture, discussion, visual presentations, demonstrations, workshops, and actual case applications
- Trainer qualifications
- How and where the permanent training attendance records will be maintained for employees, such as in employee personnel records, EH&S files, and department training files

The frequency of training shall be:

Upon assignment to an affected function
As required due to regulatory change
Annually, or as required by local regulations

APPENDIX A REFERENCED DOCUMENTS

A.1 Documents External to Digital

Document Number	Document Title
	European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR)
	International Air Transport Association Dangerous Goods Regulations (IATA)
	International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO)
	International Maritime Dangerous Goods Code (IMO)
	New South Wales Dangerous Goods Regulations (Australia)
	Regulations Concerning the International Carriage of Dangerous Goods by Rail (RID)
	Statutes of the Republic of Singapore (Poisons Act)
	Title 49 Code of Federal Regulations (United States)
	Transportation of Dangerous Goods Regulations (Canada)
	United Kingdom Dangerous Substances Regulations
	United Nations Recommendations on the Transport of Dangerous Goods (Orange Book)

VTX HAZMAT is a VTX application with information about hazardous materials and transportation. The application is maintained by U.S. Area Environmental, Health, Safety and Transportation. Enter VTX HAZMAT at the system prompt on your terminal or workstation; contact your system manager in case of difficulties.

A.2 Ordering Information

Use VTX SMC to order copies of EL-class Digital documents from Standards and Methods Control. Send distribution questions to JOKUR::SMC or call DTN: 234-4423.

The following documents are available from Labelmaster, 5724 N. Pulaski Road, Chicago, IL 60646, (800) 621-5808.

International Air Transport Association Dangerous Goods Regulations
International Civil Aviation Organization Technical Instructions for the Safe Transportation of Dangerous Goods by Air
International Maritime Dangerous Goods Code (IMO)
Title 49 Code of Federal Regulations (United States)
United Nations Recommendations on the Transport of Dangerous Goods (Orange Book)

This document is available from the United Nations' Book Store, New York or Geneva.

European Agreement Concerning the International Carriage of Dangerous Good by Road (ADR)

This document is available from Her Majesty's Stationary Office (HMSO) Bookstores in the UK and from Bernan Associates, 9730 East George Palmer Highway, Lanham, MD 20801 in the United States.

Regulations Concerning the International Carriage of Dangerous Good by Rail (RID)

This document is available from the Ministry of the Environment, 40 Scotts Road, Singapore 0922.

The Statutes of the Republic of Singapore (Poisons Act)

This document is available from Croner Publications Ltd., Croner House, 173 Kingston Road, New Malden, Surrey KT3 3SS.

Transportation of Dangerous Goods Regulations (Canada)

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